Interaction Potential for Inert Gas Mixtures

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Possible applications of the Frost-Musulin three-parameter potential, V (FM) have been discussed in a number of papers. If interacting atoms are identical, just the same expression follows exactly from the pseudopotential treatment which use permits one to obtain analytical form, V_{ij} (R), for interaction of different closed-shell atoms, too. Provided expression V (FM) holds for each i-i (and j-j) pair and parameters entering into them are known, the hybrid potential as is shown in this paper, allows satisfactory behavior V_{ij} (R) in the region of minimum and for shorter distances, too.